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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,727	08/04/2006	Xiangming Li	OP-095000281PCT	5438
46103	7590	01/02/2008	EXAMINER	
HDSL			FERGUSON, MICHAEL P	
4331 STEVENS BATTLE LANE			ART UNIT	
FAIRFAX, VA 22033			PAPER NUMBER	
			3679	
			MAIL DATE	DELIVERY MODE
			01/02/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/597,727	LI, XIANGMING	
	Examiner	Art Unit	
	Michael P. Ferguson	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 4, 6 and 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5 and 8-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Species 2, Figure 4, claims 1-3, 5 and 8-11, in the reply filed on October 18, 2007 is acknowledged.
2. Claims 4, 6 and 7 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on October 18, 2007.

Information Disclosure Statement

3. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Objections

4. Claims 1, 2, 5, 10 and 11 are objected to because of the following informalities:
Claim 1 (line 4) recites "clasping portions". It should recite --a clasping portion--.
Claim 1 (line 6) recites "clasping portion". It should recite --clasping portions--.
Claim 2 (line 2) recites "clasping portion". It should recite --clasping portions--.
Claim 2 (line 3) recites "are provided above the clasping portion". It should recite --are provided on the sliding sleeve above the clasping portions--.

Claim 5 (line 1) recites "is formed into an". It should recite --is an--.

Claim 5 (line 2) recites "the inner wall". It should recite --an inner wall--.

Claim 5 (line 4) recites "wherein". It should recite --wherein: --.

Claim 5 (line 6) recites "of the positioning rib". It should recite --of each of the positioning ribs--.

Claim 5 (line 7) recites "the outer wall encircling the". It should recite --an outer wall of the--.

Claim 5 (line 9) recites "wherein". It should recite --wherein: --.

Claim 5 (line 10) recites "the inner wall of the hole (10) of the sliding". It should recite --the inner wall of the sliding--.

Claim 5 (line 11) recites "positioning the opening and closing actions". It should recite --positioning opening and closing actions of the hinge--.

Claim 10 (lines 2-3) recites "the frame body of the shelf, and... is formed into a plate". It should recite --a frame body of a shelf, and... is a plate--.

Claim 11 (lines 2-3) recites "the frame body of the shelf, and... is formed into a plate or rod". It should recite --a frame body of a shelf, and... is a rod--.

For the purpose of examining the application, it is assumed that appropriate correction has been made.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

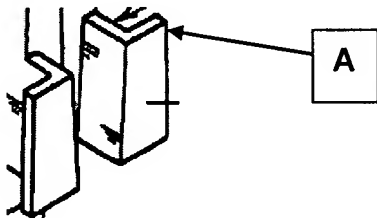
6. Claims 1-3, 5, 8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Yang (US 6,253,933).

As to claim 1, Yang discloses a shelf connector, comprising:

a sliding sleeve 3,2 formed with a locking body 7, the locking body provided with an open groove along the axial direction of the sliding sleeve, the locking body provided on both sides of the open groove with clasp portions 71; and

a locking sleeve 9 having a locking groove 91 for reducing the width of the open groove after the insertion of the clasp portions into the locking groove (Figures 1, 2 and 4).

As to claim 2, Yang discloses a shelf connector wherein the width *b* of the locking groove 91 is slightly smaller than the width *a* of the clasp portions 71, and introducing sections A (Figure 4 reprinted below with annotations) are provided on the sliding sleeve 9 above the clasp portions (Figure 4).



As to claim 3, Yang discloses a shelf connector wherein the locking body 7 is a protruding portion extending outwardly in the axial direction of the sliding sleeve 3,2 (Figure 4).

As to claim 5, Yang discloses a shelf connector wherein the sliding sleeve **3,2** is an open structure for clasping on a supporting rod **1**, an inner wall of the sliding sleeve opposing to the open groove is axially provided with a hinge **5,6** functioning as a shaft-and- pin mechanism; wherein:

the inner wall of the sliding sleeve is circumferentially and intermittently provided with positioning ribs **21**, the inner diameter of each of the positioning ribs is slightly smaller than the outer diameter of the supporting rod, an outer wall of the supporting rod is formed with positioning grooves **11** for elastically engaging with the positioning ribs; and

wherein:

the inner wall of sliding sleeve adjacent to the hinge is axially provided with a rib **21** for positioning the opening and closing actions (Figure 1).

As to claim 8, Yang discloses a shelf connector wherein the locking sleeve **9** is a flat plate, arc plate or angled plate, the locking groove **91** is arranged in a vertical or transverse direction of the locking sleeve, and the opening of the locking groove is provided in an upward, downward, leftward or rightward orientation (Figure 4).

As to claim 10, Yang discloses a shelf connector wherein a sleeve seat **92** is provided between the locking sleeve **9** and a frame body of a shelf, and the sleeve seat is a plate or rod (Figure 4).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang in view of Goldberg et al. (US 6,015,052).

As to claims 9 and 11, Yang fails to disclose a shelf connector wherein the locking sleeve is a rod, and the locking groove is formed by means of bending the rod; wherein a sleeve seat is provided between the locking sleeve and a frame body of a shelf, and the sleeve seat is a rod.

Goldberg et al. teach a shelf connector wherein a locking sleeve **36** is a rod, and a locking groove **40** is formed by means of bending the rod; wherein a sleeve seat is provided between the locking sleeve and a frame body of a shelf **16**, and the sleeve seat is a rod; the rod material of locking sleeve **36** is the same as the rod material of shelf **16**, wherein any size rod material may be used depending on material cost and availability; thus providing for a cost efficient, easy to manufacture means for securely locking sliding sleeve **42** to a supporting rod **20**, as only one material is required to manufacture both the shelf and the locking sleeve, and as a cost efficient rod material may be used (Figures 3 and 4, column 1 lines 50-54, column 2 lines 52-56).

Accordingly it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the shelf connector disclosed by Yang wherein the locking sleeve is made of rod material as taught by Goldberg et al. in order to provide a cost efficient, easy to manufacture means for securely locking the sliding sleeve to a supporting rod.

Conclusion

The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure. The following patents show the state of the art with respect to shelf connectors:

Cabrelli (US 4,615,278), Yang (US 6,044,988), Wang (US 6,068,143), Schweizer (US 4,656,952) and Nicely (US 4,750,626) are cited for pertaining to connectors comprising a sliding sleeve and a locking sleeve.

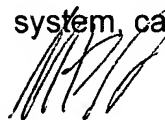
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (571)272-7081. The examiner can normally be reached on M-F (6:30am-3:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


MPF
12/28/07


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